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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/629,618	07/31/2000	Mitsuaki Kabasawa	P107443-00007	4227

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EXAMINER

SOUW, BERNARD E

ART UNIT PAPER NUMBER

2881

DATE MAILED: 05/07/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/629,618

Applicant(s)

KABASAWA, MITSUAKI

Examiner

Bernard E Souw

Art Unit

2881

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 2 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on April 28, 2003, (paper No. 8/B).
- 2a) ☐ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☒ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-24 is/are allowed.
- 6) ☐ Claim(s) _____ is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 31 July 2000 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.
- 4) ☒ Interview Summary (PTO-413) Paper No(s). 10/A.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

After-Final Amendment

1. The amendment B under 37 C.F.R. §1.116 (After Final) filed April 28, 2003, (paper No.8/B), has been entered.

This After Final Amendment is a follow up of a telephone interview conducted on 8 April 2003 between Applicant's representative, Mr. Hans J. Crosby, Reg. No. 44,634 and Patent Examiners Bernard E. Souw and John R. Lee (see attached Interview Summary, PTO-413).

Response to Amendment

2. The relevant claims having been amended according to suggestions made by the Examiners during the 8 April 2003 telephone interview, most importantly by introducing the wording "*means for*" to incorporate intended use into apparatus claims, and expressing/transforming previously pure mental exercises and abstract ideas into real actions or process steps in method claims, Applicant's request for reconsideration of the finality of the rejection of the last Office action is persuasive and, therefore, the finality of that action is withdrawn.

Withdrawal of Previous Objections

3. The relevant claims having been properly amended (see also previous section), all previous objections to the specification and claims are now withdrawn.

Withdrawal of Previous § 112 and § 101 Rejections

4. Claims 6 and 9 having been properly amended (see also previous section), their previous rejections under 35 U.S.C. §112, 2nd paragraph, are now withdrawn.

Allowable Subject Matter

5. The following is a statement of reasons for the indication of allowable subject matter: In an ion implantation apparatus and method, a method of keeping energy contamination below a desired level, which is not directly measurable, by controlling the beam transport efficiency, which is directly measurable, based on a previously measured inverse proportionality between energy contamination and beam transport efficiency, have not been anticipated or rendered obvious by any prior art.

Ex Parte Quayle

6. This application is in condition for allowance except for the following formal matters:

(a) In the Substitute Specification (paper no.5/SubSpec), page 2, lines 4-5 of paragraph [0005], the words “the *energy contamination* is defined as a *particle*” is to be changed into “the *energy contaminant* is defined as a *particle*”, simply because energy contamination is a *phenomenon*, which cannot be defined as a *particle* under any circumstances, whatsoever, as generally known in the art.

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(b) In claim 7 (Once Amended, paper no.6/A), line 1, prior to "*ion implantation method*", the indefinite article ~~--An--~~ must be used in place of the definite article ~~--The--~~.

(c) Claim 24 (Once Amended, paper no.6/A), is to be revised as follows:

~~The~~ **An** ion implantation apparatus, comprising:

a table for storing measured results in necessary beam electric current values on the basis of an inverse proportion relation between a beam transport efficiency ~~in~~ **for** each ion species and an amount of an energy contamination; and

means for adjusting the energy contamination of ion implantation ~~in the~~ **at** each necessary beam electric current value by using a ~~limit~~ **limiting** beam transport efficiency value obtained on the basis of the table.

7. Prosecution on the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

A shortened statutory period for reply to this action is set to expire **TWO MONTHS** from the mailing date of this letter.


8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Bernard E Souw whose telephone number is 703 305 0149. The examiner can normally be reached on Monday thru Friday, 9:00 am to 5:00 pm..

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John R Lee can be reached on 703 308 4116. The fax phone numbers for the organization where this application or proceeding is assigned are 703 872 9318 for regular communications and 703 872 9319 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703 308 0956.

bes
April 30, 2003


JOHN R. LEE
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2800